



CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

# NEWS RELEASE

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

---

**FOR IMMEDIATE RELEASE:**

**Release No. 04- 01**

**March 11, 2004**

**CONTACT: Allan Hirsch**

**(916) 324-0955**

**[www.oehha.ca.gov](http://www.oehha.ca.gov)**

## **OEHHA Announces Health Goal for Perchlorate in Drinking Water**

SACRAMENTO -- The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) today announced the publication of its Public Health Goal (PHG) for perchlorate, a component of rocket fuel that has been detected in a number of California drinking water sources. The development of the PHG was mandated by state law and is being published this week in compliance with a court order.

The PHG identifies 6 parts per billion as a level of perchlorate in drinking water that does not pose a significant human health risk.

"The completion of this Public Health Goal is a first step in California's efforts to address the presence of perchlorate in our state's drinking water supplies," OEHHA Director Dr. Joan Denton said. "While it is not a regulation, this goal provides scientific guidance to health authorities in setting a regulatory standard for perchlorate in drinking water."

State law next requires the California Department of Health Services (DHS) to set a regulatory drinking water standard for perchlorate that is as close to the PHG as is economically and technically feasible. A PHG is not a regulatory requirement, and it is not a boundary between "safe" and "dangerous" levels of a chemical in drinking water. PHGs are health-protective goals for drinking water contaminants that regulators and suppliers should strive to achieve if it is feasible to do so. OEHHA develops PHGs for all regulated drinking water contaminants.

Perchlorate is produced for use in rocket fuel, explosives, fireworks, road flares and air-bag inflation systems. When ingested in drinking water at significant levels, perchlorate can inhibit the ability of the thyroid gland (a butterfly-shaped gland in the throat) to take up iodide, an essential nutrient. Continuous iodide deficiency can disrupt the thyroid's production of two key hormones that regulate the body's metabolism and physical growth.

Certain populations, such as pregnant women and infants, are particularly susceptible to adverse health effects when thyroid disruption persists. Impairment of thyroid function in pregnant women may affect the fetus and result in delayed development and decreased learning capability. Infants can be similarly affected. Although research has found that perchlorate at high levels can limit the uptake of iodide by the thyroid gland, studies have not directly measured the impact of perchlorate on human metabolism and growth.

In developing the PHG, OEHHA scientists conducted a comprehensive review of all available scientific studies on the health effects of perchlorate. OEHHA based the PHG on data from a highly regarded 2002 study in which human volunteers (all healthy adults) were given perchlorate in drinking water over a 14-day period. Using a well-accepted method, OEHHA scientists added margins of safety to the study's data on adults to calculate a PHG that protects the susceptible populations.

"The PHG was rigorously reviewed before it was finalized," Dr. Denton said. "We submitted our draft PHG documents to the University of California for two separate rounds of external scientific peer review. U.S. Environmental Protection Agency scientists also conducted a peer review. In addition, we held two public comment periods and a public workshop on our draft PHG documents."

The National Academy of Sciences (NAS) is conducting an evaluation of U.S. EPA's 2002 Draft Toxicological and Risk Characterization for Perchlorate. This is an important undertaking that may help guide efforts to study the health effects of perchlorate. When that evaluation is completed, OEHHA will carefully review the NAS conclusions and will revise the PHG as necessary.

OEHHA began development of the perchlorate PHG in 1998 at the direction of then-Governor Pete Wilson. In 2002, the Legislature approved SB 1822, a bill by Senator Byron Sher that set a deadline of January 1, 2003 for publication of a perchlorate PHG. Also in 2002, Lockheed Martin and Kerr McGee sued OEHHA over a procedural issue involving external scientific peer review of the draft PHG. A court order stemming from the lawsuit mandated a second round of peer review by the University of California and required OEHHA to finalize the PHG within 60 days of the peer review's completion, which occurred in January 2004.

In compliance with the court order, the full PHG document for perchlorate will be available on March 12, 2004 with additional information on OEHHA's Web site at [www.oehha.ca.gov](http://www.oehha.ca.gov).

*The Office of Environmental Health Hazard Assessment is one of six entities within the California Environmental Protection Agency. OEHHA's mission is to protect and enhance public health and the environment by objective scientific evaluation of risks posed by hazardous substances.*

oOo